RTCA Special Committee 186, Working Group 5

ADS-B UAT MOPS

Meeting #4

Un-resolved Issues or Questions not tracked specifically by Action Items

Presented by: Gary Furr, Titan Corp., FAA Technical Center

SUMMARY

The following table is offered as a response to Action Item 3-24 calling for the creation of a method to track issues or outstanding questions that were un-resolved, or otherwise not officially tracked via an Action Item. The following table will be maintained and reported in the Minutes of this and future UAT MOPS Meetings until such time as it is no longer required.

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Un-resolved Issues or Questions not tracked specifically by Action Items

Issue #	Issue/Question Description	Raised by	Date Raised	Status
1	What is the best approach to determining the length of the ADS-B message for proper R/S decoding? If a separate 8 bit length ID field is used outside the R/S block – as is the current Capstone approach – could a half rate code supporting 4 information bits be supported to identify payload type? If the length ID is only 2-state, could it be shortened from 8 bits?	Chris Moody UAT-WP-2-06	20 Feb 01	
2	What is the best combination of CRC and FEC for meeting integrity requirements most efficiently	Chris Moody UAT-WP-2-06	20 Feb 01	
3	Quantify the benefits for "preamble re-trigger" and specify if necessary How many parallel decode paths are needed? How to deal with sync pattern in the data?	Chris Moody UAT-WP-2-06	20 Feb 01	
4	What is the optimum sync threshold "score" that is best matched to the overall message decoding success while minimizing false alarm for re-trigger? Should the threshold be specified? If so, how is it tested?	Chris Moody UAT-WP-2-06	20 Feb 01	
5	Can a minimal installation without an "On Ground" indication continue alternating top and bottom antennas for transmit without significantly sacrificing performance?	Chris Moody UAT-WP-2-06	20 Feb 01	
6	What is the minimum isolation required for antenna switching (20 dB in 1090 MOPS)?	Chris Moody UAT-WP-2-06	20 Feb 01	
7	Is an explicit specification needed to describe the filtration on the transmitted signal? If so, how to specify? If not, what implementation loss are we allowing?	Chris Moody UAT-WP-2-06	20 Feb 01	
8	What kind of receive filtration specification is required?	Chris Moody UAT-WP-2-06	20 Feb 01	
9	What minimum specification is required on baud rate timing to allow reception of the entire uplink using a single sync sequence? Is it practical to require this minimum?	Chris Moody UAT-WP-2-06	20 Feb 01	

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